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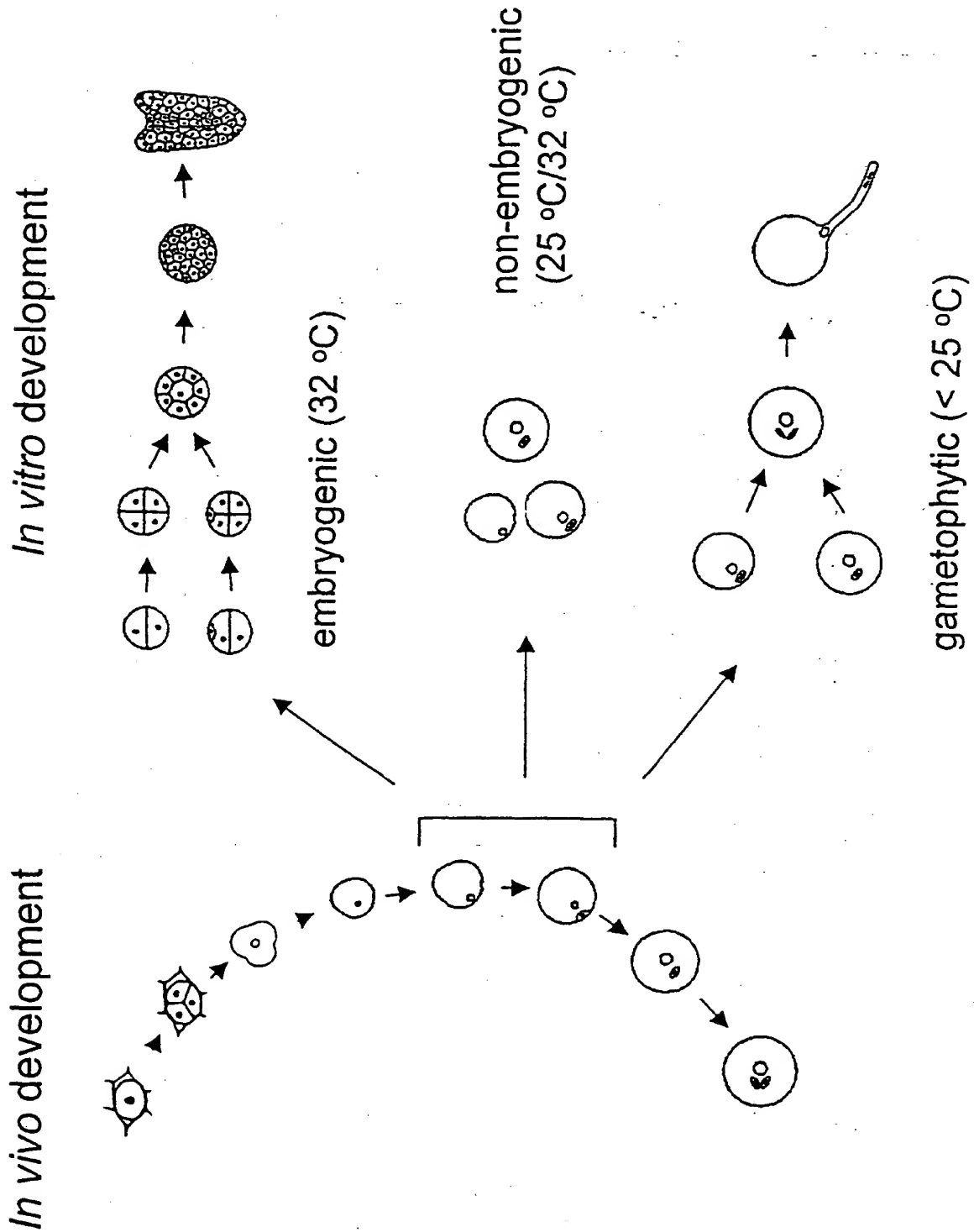


FIGURE 1

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FIGURE 2

BNM3A GTTCATCTCTCTTTAAGACCAAAACCTTTTTCTCCTCCTTTCATGCATGAACCTA 60
BNM3B -----

BNM3A ACTAAGTTCTTCTTTTACCTTTTACCAAGAACTCGTTAGATCACTCTCTGAACTCAA 120
BNM3B -----TTCTTCTTTTACCTTTTACCAAGAACTCGTTAGATCATTTTCTGAACTCGA 51

BNM3A TGAATAATAACTGGTTAGGCTTTTCTCTCTCCTTATGAACAAAATCACCATCGTAAGG 180
BNM3B TGAATAATAACTGGTTAGGCTTTTCTCTCTCCTTATGAACAAAATCACCATCGTAAGG 111

BNM3A ACGTCTACTCTTCCACCACCACAACCGTCGTAGATGTCGCCGAGAGTACTGTTACGATC 240
BNM3B ACGTCTGCTCTTCCACCACCACAACCGCCGTAGATGTCGCCGAGAGTACTGTTACGATC 171

BNM3A CGACCGTCGCTCCGATGAGTCTTCAGCCATCCAAACATCGTTTCCTTCTCCCTTTGGTG 300
BNM3B CGACCGTCGCTCCGATGAGTCTTCAGCCATCCAAACATCGTTTCCTTCTCCCTTTGGTG 231

BNM3A TCGTCGTGATGCTTTTACCAGAGACAACAATAGTCACTCCCGAGATTGGGACATCAATG 360
BNM3B TCGTCCTCGATGCTTTTACCAGAGACAACAATAGTCACTCCCGAGATTGGGACATCAATG 291

BNM3A GTTGTGCATGCAATAACATCCACAACGATGAGCAAGATGGACCAAAGCTTGAGAATTTCC 420
BNM3B GTAGTGATGTAATAACATCCACAATGATGAGCAAGATGGACCAAAGCTTGAGAATTTCC 351
** *****

BNM3A TTGGCCGCACCACCACGATTTACAACACCAACGAAAACGTTGGAGATGGAAGTGGAAGTG 480
BNM3B TTGGCCGCACCACCACGATTTACAACACCAACGAAAACGTTGGAGATATCGATGGAAGTG 411

BNM3A GCTGTTATGGAGGAGGAGACGGTGGTGGTGGCTCACTAGGACTTTTCGATGATAAAGACAT 540
BNM3B GGTGTTATGGAGGAGGAGACGGTGGTGGTGGCTCACTAGGACTTTTCGATGATAAAGACAT 471
* *****

BNM3A GGCTGAGAAATCAACCCGTGGATAATGTTGATAATCAAGAAAATGGCAATGCTGCAAAAG 600
BNM3B GGCTGAGAAATCAACCCGTGGATAATGTTGATAATCAAGAAAATGGCAATGCTGCAAAAG 531

BNM3A GCCTGTCCCTCTCAATGAACTCATCTACTTCTTGTGATAACAACAACGACAGCAATAACA 660
BNM3B GCCTGTCCCTCTCAATGAACTCATCTACTTCTTGTGATAACAACAACGACAGCAATAACA 591

BNM3A ACGTTGTTGCCAAGGGAAGACTATTGATGATAGCGTTGAAGCTACACCGAAGAAAATA 720
BNM3B ACCTTGTTGCCAAGGGAAGACTATTGATGATAGCGTTGAAGCTACACCGAAGAAAATA 651
** *****

BNM3A TTGAGAGTTTGGACAGAGGACGCTCTATATACCGCGGTGTTACAAGGCATCGGTGGACAG 780
BNM3B TTGAGAGTTTGGACAGAGGACGCTCTATATACCGCGGTGTTACAAGGCATCGGTGGACAG 711

BNM3A GAAGATATGAGGCACATTTATGGGATAATAGTTGTAAAAGAGAAGGCCAAACGCGCAAAG 840
BNM3B GAAGATATGAGGCACATTTATGGGATAATAGTTGTAAACGAGAAGGCCAAACGCGCAAAG 771

BNM3A GAAGACAAGTTTATTTGGGAGGTTATGACAAAGAAGAAAAAGCAGCTAGGGCTTATGATT 900
BNM3B GAAGACAAGTTTATTTGGGAGGTTATGACAAAGAAGAAAAAGCAGCTAGGGCTTATGATT 831

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FIGURE 2(Cont'd)

BNM3A TAGCCGCACTCAAGTATTGGGGAACCACCACTACTACTAACTTCCCCATGAGCGAATATG 960
BNM3B TAGCCGCACTCAAGTATTGGGGAACCACCACTACTACTAACTTCCCCATGAGCGAATATG 891

BNM3A AAAAAGAGGTAGAAGAGATGAAGCACATGACAAGGCAAGAGTATGTTGCCTCACTGCGCA 1020
BNM3B AGAAAGAGATAGAAGAGATGAAGCACATGACAAGGCAAGAGTATGTTGCCTCACTTCGCA 951
* *****
BNM3A GGAAAAGTAGTGGTTTCTCTCGTGGTGCATCGATTTATCGTGGAGTAACAAGACATCACC 1080
BNM3B GGAAAAGTAGTGGTTTCTCTCGTGGTGCATCGATTTATCGTGGAGTAACAAGACATCACC 1011

BNM3A AACATGGAAGATGGCAAGCTAGGATAGGAAGAGTGCCTGGTAACAAAGACCTCTACTTGG 1140
BNM3B AACATGGAAGATGGCAAGCTAGGATAGGAAGAGTGCCTGGTAACAAAGACCTCTACTTGG 1071

BNM3A GAACTTTTGGCACACAAGAAGAAGCTGCAGAGGCATACGACATTGCGGCCATCAAATTCA 1200
BNM3B GAACTTTTGGCACACAAGAAGAAGCTGCAGAGGCATACGACATTGCGGCCATCAAATTCA 1131

BNM3A GAGGATTAACCGCAGTGAATACTTCGACATGAACAGATAACAACGTTAAAGCAATCCTCG 1260
BNM3B GAGGATTAACCGCAGTGAATACTTCGACATGAACAGATAACAACGTTAAAGCAATCCTCG 1191

BNM3A AAAGCCCTAGTCTTCTCTATTGGTAGCGCCGCAAAACGTTCTCAAGGAGGCTAACCGTCCGG 1320
BNM3B AAAGCCCTAGTCTTCTCTATTGGTAGCGCCGCAAAACGTTCTCAAGGAGGCTAACCGTCCGG 1251

BNM3A TTCCAAGTATGATGATGATCAGTAATAACGTTTCAGAGAGTGAGAATAGTGCTAGCGGTT 1380
BNM3B TTCCAAGTATGATGATGATCAGTAATAACGTTTCAGAGAGTGAGAATAATGCTAGCGGTT 1311

BNM3A GGCAAAACGCTGCGGTTTTCAGCATCATCAGGGAGTAGATTTGAGCTTATTGCACCAACATC 1440
BNM3B GGCAAAACGCTGCGGTTTTCAGCATCATCAGGGAGTAGATTTGAGCTTATTGCAGCAACATC 1371

BNM3A AAGAGAGGTACAATGGTTATTATTACAATGGAGGAACTTGTCTTCGGAGAGTGCTAGGG 1500
BNM3B AAGAGAGGTACAATGGTTATTATTACAATGGAGGAACTTGTCTTCGGAGAGTGCTAGGG 1431

BNM3A CTTGTTTCAAACAAGAGGATGATCAACACCATTTCCTTGAGCAACACGCAGAGCCTCATGA 1560
BNM3B CTTGTTTCAAACAAGAGGATGATCAACACCATTTCCTTGAGCAACACGCAGAGCCTCATGA 1491

BNM3A CTAATATCGATCATCAAAGTTCTGTTTCGGATGATTCCGTTACTGTTTGTGGAATGTTG 1620
BNM3B CTAATATCGATCATCAAAGTTCTGTTTCAGATGATTCCGTTACTGTTTGTGGAATGTTG 1551

BNM3A TTGGTTATGGTGGTTATCAAGGATTTGCAGCCCCGGTTAACTGCGATGCCTACGCTGCTA 1680
BNM3B TTGGTTATGGTGGTTATCAAGGATTTGCAGCCCCGGTTAACTGCGATGCCTACGCTGCTA 1611

BNM3A GTGAGTTTGAATAACGCAAGAAACCATTATTACTTTGCTCAGCAGCAGACCCAGC 1740
BNM3B GTGAGTTTGAATAACGCAAGAAACCATTATTACTTTGCTCAGCAGCAGACCCAGC 1671

BNM3A AGTCGCCAGGTGGAGATTTTCCCGCGGCAATGACGAATAATGTTGGCTCTAATATGTATT 1800
BNM3B ATTGCCAGGAGGAGATTTTCCCGCGGCAATGACGAATAATGTTGGCTCTAATATGTATT 1731
* *****
BNM3A ACCATGGGGAAGGTGGTGGAGAAGTTGCTCCAACATTTACAGTTTGGAAACGACAATTAGA 1860
BNM3B ACCATGGGGAAGGTGGTGGAGAAGTTGCTCCAACATTTACAGTTTGGAAACGACAATTAGA 1791

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FIGURE 2(Cont'd)

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BNM3A  AAAAAATAGTTAAAGATCTTTAGTTATATGCGTTGTTGTGTGCTGGTGAACAGTGTGATAC 1920
BNM3B  AATAATAGTTAAAGATCTTTAGTTATATGCGTTGTTGTGTGCTGGTGAACAGTTTGATAC 1851
** *****

BNM3A  TTTGATTATGTTTTTTCTTTCTCTTTTCTTTTCTTGGTTAATTTCTTAAGACTTATT 1980
BNM3B  TTTGATTATGTTTTTT--TTTCTCTTTTCATTTTGTGTTAGTTTCTTAAGACTTATT 1909
*****

BNM3A  TTTAGTTTCCATTAGTTGGATAAAATTTTCAGACT----- 2014
BNM3B  TTTTGTTCATTAGTTGGATAAAATTTTCGGACTTAAGGGTCACCTTCTGTTCTGACTTCT 1969
*** *****

BNM3A  -----
BNM3B  GTCTAATACAGAAAAGTTTTCAT 1992

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FIGURE 3

BNM3A MNMNWLGFSLSPYEONHHRKDVYSSTTTTVDVAGEYCYDPTAASDESSAIQTSFSPSPFG 60
BNM3B MNMNWLGFSLSPYEONHHRKDVCSSTTTTAVDVAGEYCYDPTAASDESSAIQTSFSPSPFG

BNM3A VVVD AFTRDNNSHSRDWDINGCACNNIHND EQDGP KLENFLGR TTTIYNTNENVGDGSGS 120
BNM3B VVLD AFTRDNNSHSRDWDINGSACNNIHND EQDGP KLENFLGR TTTIYNTNENVGDIDGS
** *****
BNM3A GCYGGG DGGGSLGLSMIKTWLRNQPVDNVDNQENGNAAGLSLSMNSSTSCDNNNDSNN 180
BNM3B GCYGGG DGGGSLGLSMIKTWLRNQPVDNVDNQENGNGAKLSLSMNSSTSCDNNNYSSN

repeat 1
BNM3A NVVAQGKTIDDSVEATPKKTIESFGQRTSIYRGVTRHRWTGRYEAHLWDNSCKREGQTRK 240
BNM3B NLVAQGKTIDDSVEATPKKTIESFGQRTSIYRGVTRHRWTGRYEAHLWDNSCKREGQTRK
* *****
BNM3A GRQVYLGGYDKKEKAARAYDLAALKYWGTTTTTTFPMSEYEKEVEEMKHMTRQEYVASLR 300
BNM3B GRQVYLGGYDKKEKAARAYDLAALKYWGTTTTTTFPMSEYEKEVEEMKHMTRQEYVASLR

repeat 2
BNM3A RKSSGF SRGASIYRGVTRHHQHGRWQARIGRVAGNKDLYLGTFTGTQEEAAEAYDIAAIKF 360
BNM3B RKSSGF SRGASIYRGVTRHHQHGRWQARIGRVAGNKDLYLGTFTGTQEEAAEAYDIAAIKF

BNM3A RGLTAVTNFDMNRYNVKAILSPSLPIGSAAKRLKEANRPVPSPMMISNNVSESENASG 420
BNM3B RGLTAVTNFDMNRYNVKAILSPSLPIGSAAKRLKEANRPVPSPMMISNNVSESENNASG

BNM3A WQNAAVQHHQGVDLSLLHQHQERYNGYYYNGGNLSSSARACFKQEDDQHHFLSNTQSLM 480
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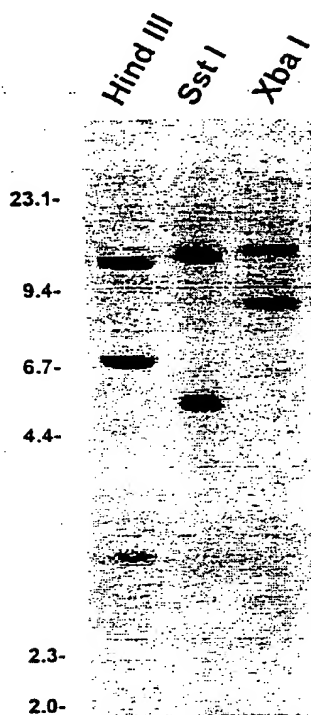
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BNM3B TNIDHQSSVSDDSVTVCGNVVGYGGYQGFAAPVNC DAYAASEFDYNARNHYFFAQQQQTQ

BNM3A QSPGGDFPAAMTNNVGSNMYYHGE GGGEVAPTFTVWNDN 579
BNM3B HSPGGDFPAAMTNNVGSNMYYHGE GGGEVAPTFTVWNDN

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Figure 4

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FIGURE 5

AP2 DOMAIN REPEAT 1

BNM3 TSIYRGVTRHRWTGRYEHLWDNSCKREGQTRKGRQVYLGGYDKKEKAARAYDLAALKYWGTTTTTTFPMSEYEKEV
ANT T*Q*****F*K**HS*****M*****PS*H***SAEN*Q**I
ZM T*****E***R*****S*****F*****P*****QV*N***L
GL15 S*Q*****FY*R**W*S*I*--C-----*K*****F*TAQA*****Q**I*FR*LNADI**TLDD*KD*M
AP2 S*Q*****FY*R**W*S*I*--C-----*K*****F*TAHA*****R**I*FR*VEADI**NIDD*DDDL

LINKER

BNM3 EEMKHMTRQEYVASLRRKSSGFSRG
ANT *D**N*****H*****
ZM ***S*****FI*****
GL15 KK**DLSKE*F*LV***QGA**V**
AP2 KQ*TNL*KE*F*HV***Q*T**P**

AP2 DOMAIN REPEAT 2

BNM3 ASIYRGVTRHHQHGRWQARIGRVAGNKDLYLGTFGTQEAAEAYDIAAIKFRGLTAVTNFDMNRYNVKA
ANT *****V*****TN*****IT**D*DR
ZM *****S*****N*****L**S**D*ES
GL15 S*RF*****-Q*KC*K**E*****QLM*K*YV***LYD*ET***Q**K***CY*KE*****AQSD*DKEL
AP2 S*K*****-L*KC***E**M*QFL*K*YV***L*D*EV***R***K***CN*KD*****PSI*DEEL

WO 00/75330

Inventor: BOETTILER et al.
Docket No: 62USWO
Title: USING THE BNM3 TRANSCRIPTIONAL ACTIVATOR TO CONTROL PLANT EMBRYOGENESIS AND REGENERATION PROCESS
Attorney Name: Gregory A. Sebold
Phone No.: 612.336.4728
Sheet 7 of 11

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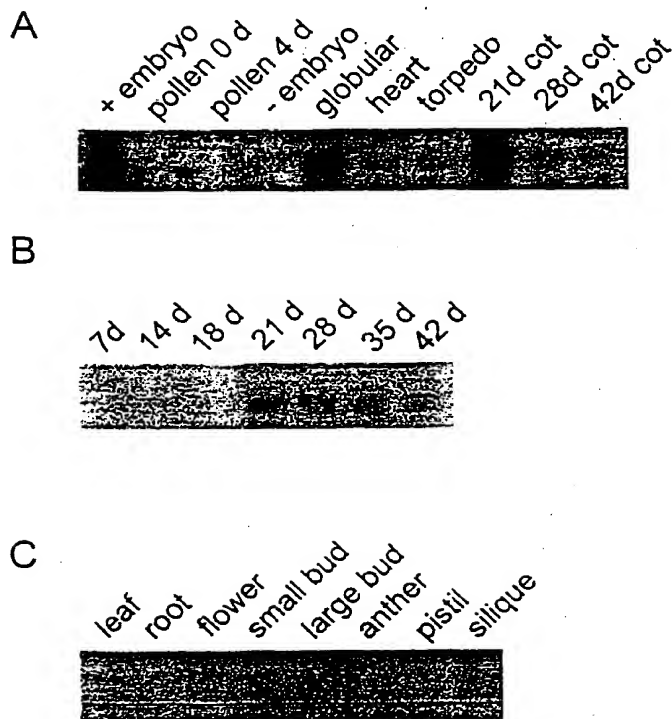
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WO 00/75330

Inventor: TILER et al.
Docket: 0.62USWO
Title: USE OF THE BNM3 TRANSCRIPTIONAL ACTIVATOR TO CONTROL PLANT
EMBRYOGENESIS AND REGENERATION PROCESS
Attorney Name: Gregory A. Sebold
Phone No.: 612.336.4728
Sheet 8 of 11

PCT/CA00/00642

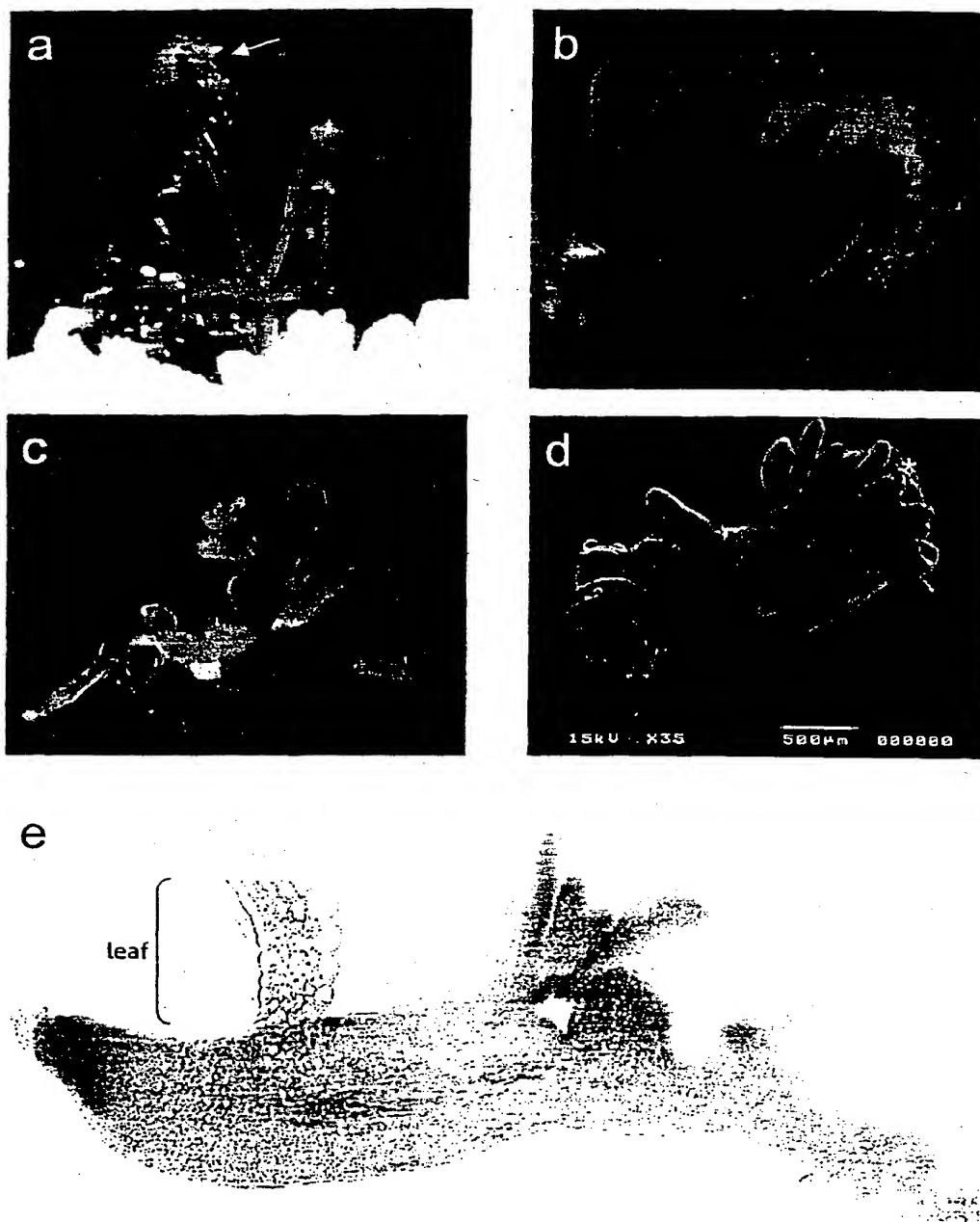
FIGURE 6



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CA00/00642

FIGURE 7



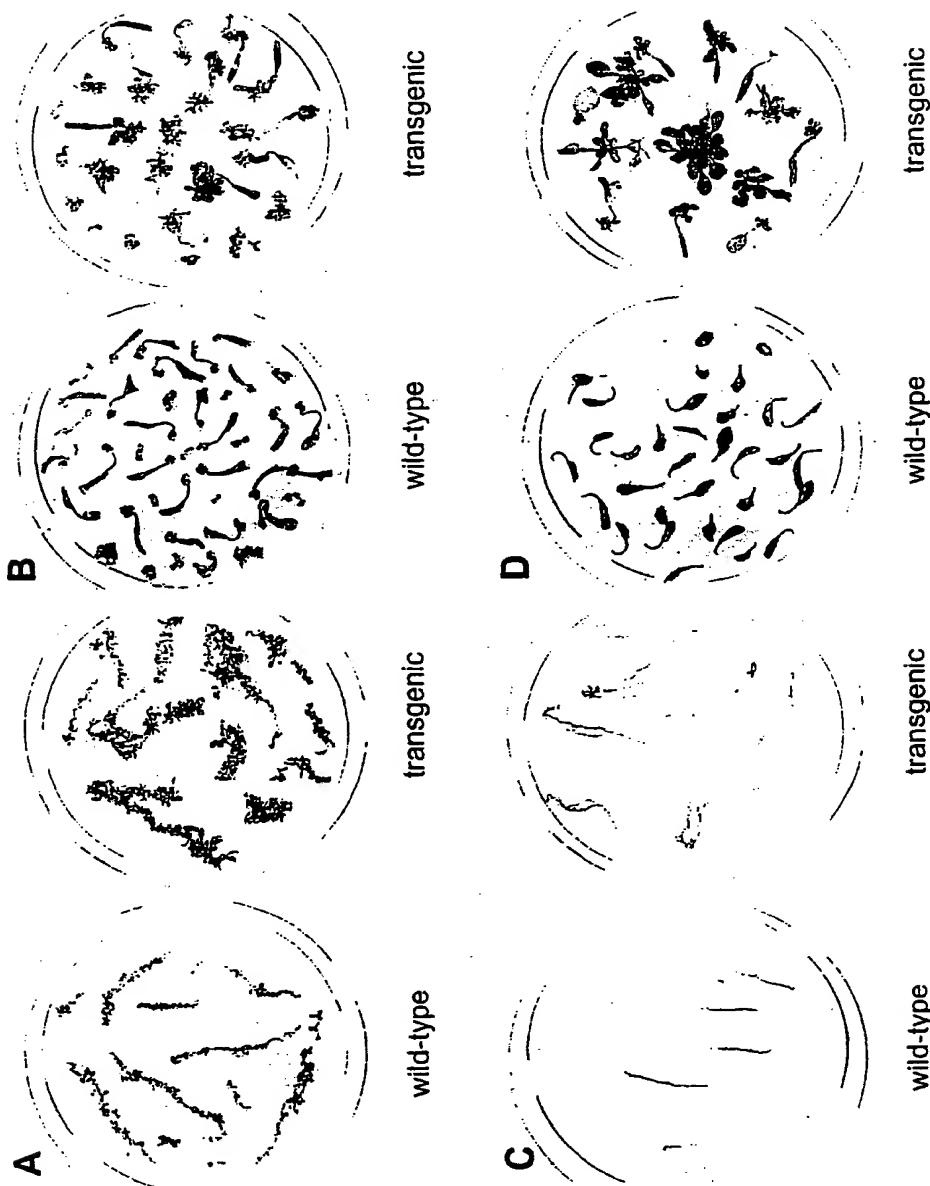
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FIGURE 8



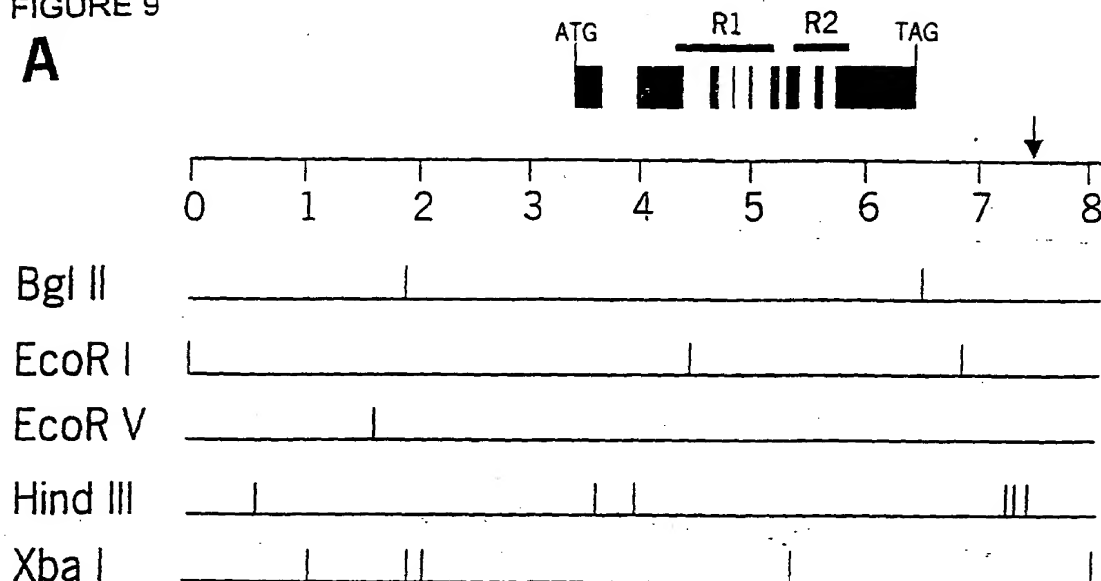
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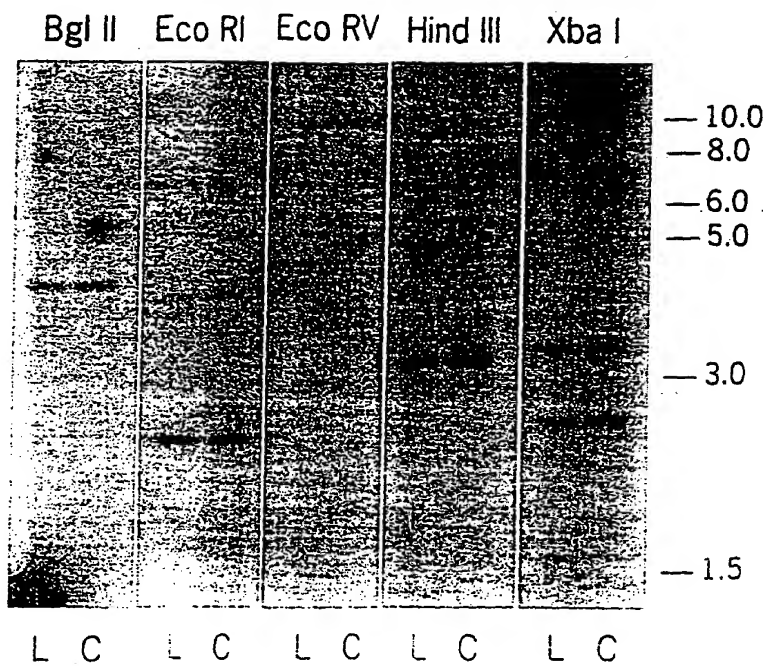
FIGURE 9

A



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B



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